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COMMONWEALTH OF VIRGINIA Department of Environmental Quality Southwest Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Buchanan Preparation Plant - Consolidation Coal Company
State Route 632, Garden Creek, Buchanan County, Virginia
Permit No. SWRO10945

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Consolidation Coal Company has applied for a Title V Operating Permit for its Buchanan Preparation Plant facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact: _____ Date: _____
Bruce Mullins
(276) 676-4825

Air Permit Manager: _____ Date: _____
Rob Feagins

Deputy Regional Director: _____ Date: _____
Dallas R. Sizemore

FACILITY INFORMATION

Permittee

Consolidation Coal Company
P.O. Drawer L
Oakwood, VA 24631

Facility

Buchanan Preparation Plant
Route 632
Garden Creek, Virginia

County-Plant Identification Number: 51-027-00081

SOURCE DESCRIPTION

NAICS Code: 212112 - Coal preparation

The facility cleans and dries coal prior to shipment by railcar or truck. The facility utilizes a coal-bed methane/coal-fired thermal dryer to dry the coal that is cleaned by the preparation plant, which includes froth flotation and vacuum filtration. A Prevention of Significant Deterioration (PSD) permit was issued on September 26, 2001, for the installation of an additional coal-fired thermal dryer and modification of the coal preparation plant. A redesign of the project did not include the second thermal dryer, second preparation plant and much of the associated equipment, and through subsequent permitting actions, the company is no longer permitted to construct and operate the second thermal dryer and second coal preparation plant.

Air emissions from the facility include particulate matter (PM), and particulate matter with a mean diameter of less than or equal to 10 microns (PM-10) from all the dry processing units; volatile organic compounds (VOC) from wet coal processing; and, VOC, oxides of nitrogen (NO_x), sulfur dioxide (SO₂), carbon monoxide (CO) and hazardous air pollutants (HAP) from thermal drying.

The facility is a Title V major source of PM-10, VOC, CO, SO₂ and NO_x. This source is located in an attainment area for all pollutants. The facility is currently permitted under a PSD permit issued on July 30, 2004 (as amended August 24, 2005).

COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, was conducted on July 13 and August 28, 2006. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
S001A	Z01	Hoist #1 dump to 100-ton surge bin BIN1	1200 TPH	Partial Enclosure	D001	PM/PM-10	7/30/04 (as amended 8/24/05)
S001B	Z01	Skip to Ground	300 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S001C	Z01	BIN1 feeder to rotary breaker RB1 pre-screens SC1	1200 TPH	Full Enclosure	D002	PM/PM-10	7/30/04 (as amended 8/24/05)
S001E	Z01	SC1 underflow to raw coal silo RCS1 feed conveyor C1	1200 TPH	Full Enclosure	D004	PM/PM-10	7/30/04 (as amended 8/24/05)
S001F	Z01	SC1 overflow to rotary breaker RB1	1200 TPH	Full Enclosure	D005	PM/PM-10	7/30/04 (as amended 8/24/05)
S001H	Z01	RB1 breaker reject to breaker reject conveyor C15	1200 TPH	Full Enclosure	D007	PM/PM-10	7/30/04 (as amended 8/24/05)
S001I	Z01	RB1 breaker reject conveyor C15 to reject crusher CR1	1200 TPH	Full Enclosure	D008	PM/PM-10	7/30/04 (as amended 8/24/05)
S002	Z01	RB1 product to raw coal silo RCS1 feed conveyor C1	1200 TPH	Full Enclosure	D010	PM/PM-10	7/30/04 (as amended 8/24/05)
S003	Z01	Feeder to Reclaim Hopper	300 TPH	Partial Enclosure	D011	PM/PM-10	7/30/04 (as amended 8/24/05)
S004	Z01	Reclaim Hopper to Conveyor No. 2	300 TPH	Partial Enclosure	D012	PM/PM-10	7/30/04 (as amended 8/24/05)
S005	Z01	Conveyor No. 2 to Reclaim Crusher	300 TPH	Partial Enclosure	D013	PM/PM-10	7/30/04 (as amended 8/24/05)
S006	Z01	Reclaim Crusher	300 TPH	Full Enclosure	D014	PM/PM-10	7/30/04 (as amended 8/24/05)
S007	Z01	Reclaim Crusher to Conveyor No. 3	300 TPH	Partial Enclosure	D015	PM/PM-10	7/30/04 (as amended 8/24/05)
S008	Z01	Conveyor No. 3 to Conveyor No. 1	300 TPH	Partial Enclosure	D016	PM/PM-10	7/30/04 (as amended 8/24/05)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
S009	Z01	Conveyor No. 1 to Raw Coal Silo RCS1	1200 TPH	Full Enclosure	D017	PM/PM-10	7/30/04 (as amended 8/24/05)
S011	Z01	Raw Coal Silo to Conveyor No. 4	1100 TPH	Full Enclosure	D018	PM/PM-10	7/30/04 (as amended 8/24/05)
S012	Z01	Rail Car Loadout Chute No. 1	100 TPH	Stationary Chute No. 1	D019	PM/PM-10	7/30/04 (as amended 8/24/05)
S013	Z01	Rail Car Loadout Chute No. 2	100 TPH	Stationary Chute No. 2	D020	PM/PM-10	7/30/04 (as amended 8/24/05)
S014	Z01	Conveyor No. 4 to Preparation Plant	1100 TPH	Full Enclosure	D021	PM/PM-10	7/30/04 (as amended 8/24/05)
S015	Z01	Preparation Plant (Froth Flotation)	1100 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S015A	P001	Vacuum Filtration	1100 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S015B	Z01	Thickener	1100 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S016	Z01	TD1 feed conveyor C6 to thermal dryer TD1	560 TPH	Full Enclosure	D046	PM/PM-10	7/30/04 (as amended 8/24/05)
S017	P002	Thermal Dryer #1 - Gas Firing	560 TPH	Venturi Scrubber	D022	PM/PM-10, SO ₂	7/30/04 (as amended 8/24/05)
S017A	P002	Thermal Dryer #1 - Coal Firing	560 TPH	Venturi Scrubber	D022	PM/PM-10, SO ₂	7/30/04 (as amended 8/24/05)
S018	Z01	TD1 reclaim conveyor C8 to clean coal silo CCS 1 feed conveyor C9	560 TPH	Full Enclosure	D023	PM/PM-10	7/30/04 (as amended 8/24/05)
S019	Z01	Conveyor C 5 (TD1 by-pass) to CCS 1 feed conveyor C9	560 TPH	Full Enclosure	D023	PM/PM-10	7/30/04 (as amended 8/24/05)
S020	Z01	Conveyor C19 to CCS1 feed conveyor C9	300 TPH	Full Enclosure	D023	PM/PM-10	7/30/04 (as amended 8/24/05)
S021	Z01	Feed conveyor C9 to clean coal silo CCS1	2400 TPH	Full Enclosure	D024	PM/PM-10	7/30/04 (as amended 8/24/05)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
S022	Z01	CCS1 feed conveyor C9 to clean coal stacking tube feed conveyor C10	2400 TPH	Full Enclosure	D024	PM/PM-10	7/30/04 (as amended 8/24/05)
S023	Z01	Conveyor C10 to clean coal stockpile CCSP1 stacking tube ST1	2400 TPH	Partial Enclosure	D025	PM/PM-10	7/30/04 (as amended 8/24/05)
S025	Z01	Dozer grading clean coal stockpile CCP1	500 TPH	Water Spray	D026	PM/PM-10	7/30/04 (as amended 8/24/05)
S026	Z01	CCP1 under-pile feeder to reclaim conveyor C11	4000 TPH	Full Enclosure	D027	PM/PM-10	7/30/04 (as amended 8/24/05)
S027	Z01	CCP1 reclaim conveyor C11 to rail loadout conveyor C13	4000 TPH	Full Enclosure	D028	PM/PM-10	7/30/04 (as amended 8/24/05)
S028	Z01	CCS1 reclaim feeder to reclaim conveyor C12	4000 TPH	Full Enclosure	D054	PM/PM-10	7/30/04 (as amended 8/24/05)
S029	Z01	CCS1 reclaim conveyor C12 to rail loadout conveyor C13	4000 TPH	Full Enclosure	D028	PM/PM-10	7/30/04 (as amended 8/24/05)
S030	Z01	Rail loadout conveyor C13 to rail loadout	4000 TPH	Full Enclosure	D029	PM/PM-10	7/30/04 (as amended 8/24/05)
S031	Z01	Dust control	4000 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S032	Z01	Rail car loading through telescopic chute	4000 TPH	Telescopic Chute	D030	PM/PM-10	7/30/04 (as amended 8/24/05)
S033	Z01	Truck loading through stationary chute	200 TPH	Stationary Chute No. 3	D031	PM/PM-10	7/30/04 (as amended 8/24/05)
S034	Z01	Conveyor No. 17 to House Coal Loadout	200 TPH	Partial Enclosure	D032	PM/PM-10	7/30/04 (as amended 8/24/05)
S035	Z01	Truck loading of house coal	25 TPH	Stationary Chute No. 4	D033	PM/PM-10	7/30/04 (as amended 8/24/05)
S036	Z01	Conveyor No. 17 to Conveyor No. 18	200 TPH	Partial Enclosure	D032	PM/PM-10	7/30/04 (as amended 8/24/05)
S037	Z01	Conveyor No. 18 to Truck Loadout Feeder	200 TPH	Partial Enclosure	D033	PM/PM-10	7/30/04 (as amended 8/24/05)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
S038	Z01	Truck Loadout Feeder to Truck Loadout No. 1	200 TPH	Partial Enclosure	D034	PM/PM-10	7/30/04 (as amended 8/24/05)
S039	Z01	Truck Loadout Feeder to Truck Loadout No. 2	200 TPH	Partial Enclosure	D035	PM/PM-10	7/30/04 (as amended 8/24/05)
S040	Z01	Stationary Chute Truck Loading No. 1	125 TPH	Stationary Chute No. 5	D036	PM/PM-10	7/30/04 (as amended 8/24/05)
S041	Z01	Stationary Chute Truck Loading No. 2	125 TPH	Stationary Chute No. 6	D037	PM/PM-10	7/30/04 (as amended 8/24/05)
S042	Z01	Reject crusher CR1 to refuse bin BIN2	500 TPH	Full Enclosure	D038	PM/PM-10	7/30/04 (as amended 8/24/05)
S044	Z01	Conveyor No. 14 to refuse bin	500 TPH	Partial Enclosure	D039	PM/PM-10	7/30/04 (as amended 8/24/05)
S045	Z01	Refuse conveyor C16 to mountain refuse bin BIN3	1200 TPH	Full Enclosure	D040	PM/PM-10	7/30/04 (as amended 8/24/05)
S046	Z01	Mountain refuse bin BIN3 stationary chute to refuse truck loading	1200 TPH	Stationary Chute No. 7	D041	PM/PM-10	7/30/04 (as amended 8/24/05)
S047	Z01	Refuse truck dumping onto refuse pile	1200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S048	Z01	Dozer grading refuse pile	1200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S049	Z01	Refuse bin BIN2 dumping onto ground	1200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S050	Z01	Endloading refuse trucks	1200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S052	Z01	Truck dumping clean coal onto temporary clean coal stockpile CCP2	200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S053	Z01	Dozer grading temporary stockpile CCP2	200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
S054	Z01	Endloading clean coal trucks	200 TPH	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
S055	Z01	Unpaved Roads	73,000 VMT	Water Spray	D042	PM/PM-10	7/30/04 (as amended 8/24/05)
S056	P003	Rock dust silo	100 Tons	Fabric Vent Filter	D043	PM/PM-10	7/30/04 (as amended 8/24/05)
S057	P004	Magnetite silo	50 Tons	Fabric Vent Filter	D044	PM/PM-10	7/30/04 (as amended 8/24/05)
S058	Z01	Preparation plant PP1 fine clean coal conveyor C5	560 TPH	Full Enclosure	D021	PM/PM-10	7/30/04 (as amended 8/24/05)
S059	Z01	Conveyor C5 to thermal dryer TD1 feed conveyor C6	560 TPH	Full Enclosure	D045	PM/PM-10	7/30/04 (as amended 8/24/05)
S060	Z01	TD1 product to conveyor C7	560 TPH	Full Enclosure	D046	PM/PM-10	7/30/04 (as amended 8/24/05)
S061	Z01	TD1 product conveyor C7 to TD1 reclaim conveyor C8	560 TPH	Full Enclosure	D047	PM/PM-10	7/30/04 (as amended 8/24/05)
S062	Z01	PP1 coarse clean coal to conveyor C19	300 TPH	Full Enclosure	D021	PM/PM-10	7/30/04 (as amended 8/24/05)
S063	Z01	Stacking tube ST1 to clean coal stockpile CCP1	2400 TPH	Drop Height	D048	PM/PM-10	7/30/04 (as amended 8/24/05)
S064	Z01	PP1 refuse to main plant refuse conveyor C14	500 TPH	Full Enclosure	D021	PM/PM-10	7/30/04 (as amended 8/24/05)
S065	Z01	Refuse bin BIN2 to conveyor C16	1200 TPH	Full Enclosure	D049	PM/PM-10	7/30/04 (as amended 8/24/05)
S201	Z01	Pocket lift conveyor to truck loadout bin conveyor	650 TPH	Partial Enclosure	D201	PM/PM-10	7/30/04 (as amended 8/24/05)
S202	Z01	Truck loadout conveyor to truck loadout bin	650 TPH	Partial Enclosure	D202	PM/PM-10	7/30/04 (as amended 8/24/05)
S203	Z01	Truck loadout bin to truck	650 TPH	Partial Enclosure	D203	PM/PM-10	7/30/04 (as amended 8/24/05)
S204	Z01	Truck loadout to reclaim hopper	650 TPH	Partial Enclosure	D204	PM/PM-10	7/30/04 (as amended 8/24/05)

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant(s) Controlled	Applicable Permit Date
S205	Z01	Pocket lift conveyor to vent production conveyor #1	650 TPH	Partial Enclosure	D205	PM/PM-10	7/30/04 (as amended 8/24/05)
S206	Z01	Vent conveyor #1 to vent conveyor #2	650 TPH	Partial Enclosure	D206	PM/PM-10	7/30/04 (as amended 8/24/05)
S207	Z01	Vent production conveyor #2 to breaker bin	650 TPH	Partial Enclosure	D207	PM/PM-10	7/30/04 (as amended 8/24/05)
S208	Z01	Transfer conveyor to raw coal silo #2	650 TPH	Partial Enclosure	D208	PM/PM-10	7/30/04 (as amended 8/24/05)
S209	Z01	Trucks-Raw coal to reclaim hopper	83,853 VMT	Water Spray	D042	PM/PM-10	7/30/04 (as amended 8/24/05)
SC1	Z01	Rotary Breaker 1 Scalping Screen	1200 TPH	Full Enclosure	D003	PM/PM-10	7/30/04 (as amended 8/24/05)
CCP1	Z01	Main Clean Coal Stockpile	3.5 acres	Water Spray	D026	PM/PM-10	7/30/04 (as amended 8/24/05)
CCP2	Z01	Temporary Clean Coal Stockpile	1 acre	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
CR1	Z01	Reject Crusher 1 for RB1	1200 TPH	Full Enclosure	D009	PM/PM-10	7/30/04 (as amended 8/24/05)
RB1	Z01	Rotary Breaker 1	1200 TPH	Full Enclosure	D006	PM/PM-10	7/30/04 (as amended 8/24/05)
RCP1	Z01	Temporary Raw Coal Stockpile	1 acre	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)
RCP3	Z01	Hoist 2 Raw Coal Stockpile	1 acre	N/A	N/A	N/A	7/30/04 (as amended 8/24/05)

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

VMT = vehicle miles traveled

TPH = tons per hour

EMISSIONS INVENTORY

A copy of the 2005 Emission Statement is attached. Emissions are summarized in the following table:

2005 Actual Emissions

	Criteria Pollutant Emission in Tons/Year				
	VOC	CO	SO ₂	PM-10	NO _x
Total	64.6	29.2	0.0	38.6	18.2

EMISSION UNIT APPLICABLE REQUIREMENTS - Thermal Dryer #1: ENI coal/gas-fired "Coal-Flo" #10, Emission Unit ID: S017/S017A

Limitations

The following limitations are state BACT requirements from the PSD permit issued on July 30, 2004 (as amended August 24, 2005). Specific condition numbers noted below are from the PSD permit.

Condition 3.e: Particulate emissions from the thermal dryer shall be controlled by a high energy venturi scrubber.

Condition 7: Approved fuels for the thermal dryer are bituminous coal, coal-bed methane gas and natural gas.

Condition 8: Differential pressure drop across the venturi scrubber shall be a minimum of 21.7 inches of water.

Condition 9: Emissions from the operation of the thermal dryer shall not exceed the following:

Particulate Matter	0.025 gr/dscf	125.3 tons/yr
PM-10	0.019 gr/dscf	95.0 tons/yr
Sulfur Dioxide	0.20 lb/MMBtu	119.6 tons/yr
Nitrogen Oxides (as NO ₂)	0.46 lb/MMBtu	278.1 tons/yr
Volatile Organic Compounds	0.60 lb/MMBtu	362.7 tons/yr
Carbon Monoxide	2.34 lb/MMBtu	1,414.7 tons/yr

Condition 12: Average sulfur content of coal burned in the thermal dryer shall not exceed 1.0% by weight.

Condition 13: Visible emissions from the thermal dryer shall not exceed 20% opacity as determined by 40 CFR, Appendix A, Method 9.

Monitoring

The facility is a major source subject to Title V permitting and therefore subject to 40 CFR Part 64 – Compliance Assurance Monitoring (CAM). An emission unit is subject to CAM if it meets all of the following criteria on a pollutant-by-pollutant basis:

- a. Emits or has the potential to emit uncontrolled quantities of one or more regulated air pollutants at or above major source levels,
- b. Is subject to one or more emissions limitations for the regulated air pollutants for which it is major before control, and
- c. Uses an add-on control device to achieve compliance with the emissions limitations.

The thermal dryer is the only emission unit currently at the Buchanan plant that meets all the above criteria as follows:

- a. The thermal dryer emits uncontrolled quantities of PM, PM-10, NO_x, SO₂, VOC and CO above major source levels,
- b. The thermal dryer is subject to emission limits for PM, PM-10 and SO₂ as indicated in Condition 9 of the PSD permit, and
- c. The thermal dryer uses a venturi scrubber to comply with the emission limits for PM, PM-10 and SO₂.

Because the thermal dryer meets the above criteria only when considering PM, PM-10 and SO₂, CAM is required only for those pollutants. The applicant submitted CAM information as required by 40 CFR 64.5, Deadlines for Submittals.

The following are monitoring requirements from the PSD permit issued on July 30, 2004 (as amended August 24, 2005). Specific condition numbers noted below are from the PSD permit.

Condition 4a: Continuous measurement of thermal dryer exit gas temperature.

Condition 4b: Continuous measurement of pressure loss through the venturi constriction.

Condition 4c: Continuous measurement of water supply pressure to control equipment.

Condition 4d: Monitoring device for the measurement of the temperature of the thermal drying chamber.

Condition 4: Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be recalibrated annually. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the thermal dryer is operating.

Condition 5: The monitoring devices used to continuously measure thermal dryer and associated control system parameters shall be observed with a frequency of not less than once per hour.

The monitoring proposed in the Compliance Assurance Monitoring plan submitted by the applicant complies with monitoring required by 40 CFR Part 60, Subpart Y, Standards of Performance for Coal Preparation Plants and Conditions 4 and 5 of the PSD permit.

The permit contains requirements to monitor, operate, calibrate and maintain the above-listed devices according to the CAM plan proposed by the applicant and summarized in the following table:

Thermal Dryer Compliance Assurance Monitoring Plan

	Indicator No. 1	Indicator No. 2	Indicator No. 3	Indicator No. 4
I. Indicator	Exhaust Gas Temperature	Pressure Loss	Water Supply Pressure	Thermal drying chamber temperature
A. Measurement Approach	Temperature probe	Differential pressure gage	Pressure gage	Temperature probe
II. Indicator Range	An excursion is defined as an exit gas temperature greater than 160 °F	An excursion is defined as a pressure loss through the scrubber of less than 21.7 inches water column	An excursion is defined as a water supply pressure of less than 20 pounds per square inch gage	An excursion is defined as a drying chamber temperature greater than 1,400 °F
III. Performance Criteria	The temperature probe monitors the temperature of the gas at the exit of the thermal dryer	The differential pressure gage monitors the static pressures upstream and downstream of the scrubber's venturi throat	The water pressure gage monitors water supply pressure to the scrubber. The gage is to be located close to the water discharge point.	The temperature probe monitors the temperature at the entrance to the drying chamber (just below the restriction deck) of the thermal dryer
A. Data Representativeness				
B. Verification of Operational Status	The monitoring device shall be installed and calibrated according to manufacturer's recommendations prior to initial performance tests	The monitoring device shall be installed and calibrated according to manufacturer's recommendations prior to initial performance tests	The monitoring device shall be installed and calibrated according to manufacturer's recommendations prior to initial performance tests	The monitoring device shall be installed and calibrated according to manufacturer's recommendations prior to initial performance tests
C. QA/QC Practices and Criteria	The device is to be certified by the manufacturer to be accurate within $\pm 3^{\circ}$ Fahrenheit and calibrated annually based on the manufacturer's recommendations	The device is to be certified by the manufacturer to be accurate within ± 1 inch water gage and calibrated annually based on the manufacturer's recommendations	The device is to be certified by the manufacturer to be accurate within $\pm 5\%$ of design water supply pressure and calibrated annually based on the manufacturers recommendations	The device is to be certified by the manufacturer to be accurate within $\pm 3^{\circ}$ Fahrenheit and calibrated annually based on the manufacturer's recommendations
D. Monitoring Frequency	Measure continuously	Measure continuously	Measure continuously	Measure continuously
E. Data Collection Procedures	Record continuously on a chart recorder	Record continuously on a chart recorder	Record continuously on a chart recorder	Record continuously on a chart recorder
F. Averaging Period	None	None	None	None

The indicators to be monitored reflect the performance of the venturi scrubber and thermal dryer. The range of operation for each indicator is based on manufacturer design and performance test data. The permit contains requirements for performance tests for emissions of PM, PM-10 and SO₂ from the thermal dryer once every two years. Performance test data will be used to verify the accuracy of each indicator range so that ongoing compliance with the emission limits can be reasonably assured. Operation of the thermal dryer and venturi scrubber so that each indicator is maintained within the appropriate range will provide a reasonable assurance of compliance with the emission limits for the subject pollutants.

The permit contains conditions requiring the permittee to conduct monitoring in accordance with 40 CFR 70.6(a)(3)(i) and 40 CFR 64.6(c).

PM, PM-10, SO₂, NO_x, CO, and VOC emission limits for the thermal dryer are based on data from stack tests conducted on the unit. Stack test results indicate PM-10 emissions are 76% of PM emissions. Annual criteria pollutant emission limits were calculated by multiplying the hourly emission rates by 8,760 hours per year (hr/yr). Since criteria pollutant emission limits for the thermal dryer are based on the capacity of the dryer, there should not be a violation of the emission limits if the dryer is operated at or below capacity.

The permittee will be required to conduct weekly visual observations of the thermal dryer exhaust stack. If visible emissions appear to exceed 10% opacity during these weekly visual observations, a six-minute visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9, must be performed. If during the six minutes, any readings above 20% opacity are noted, a one-hour VEE will be required. A Method 9 evaluation will not be required if the visible emissions condition is corrected as expeditiously as possible such that no visible emissions exceed 10% opacity; the emissions unit is operating at normal conditions; and, the cause and corrective measures taken are recorded. This will satisfy the periodic monitoring requirement for the visible emission limitation included in the permit.

Recordkeeping

The Title V permit includes recordkeeping requirements from Condition 18 of the PSD permit and for maintaining records of all monitoring and testing required by the permit. These records include, but are not limited to:

The production of dried coal by the thermal dryer, calculated monthly as the sum of each consecutive 12-month period;

The consumption of coal, coal-bed methane and natural gas, indicating sulfur content for the coal for the thermal dryer, calculated monthly as the sum of each consecutive 12-month period;

The temperature of the thermal dryer gas exhaust, pressure loss through the venturi constriction of control equipment on the dryer, control equipment water supply pressure and temperature of the thermal drying chamber, recorded hourly;

Emission factors and equations used for compliance;

Visible emission observations and evaluations;

Stack tests and performance evaluations; and,

Annual cyclone inspections.

Testing

As indicated by Condition 16 of the PSD permit, the permittee will be required to conduct performance tests for SO₂, NO₂, VOC, and CO, from the thermal dryer, once every two years and upon request by the DEQ. The thermal dryer is exempt from SO₂ testing if firing gas. Additionally, the permittee will be required to conduct performance tests for particulate matter from the thermal dryer, once every two years and upon request by the DEQ.

The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

The permittee will be required to report the results of each performance test and concurrent visible emissions evaluation conducted on the thermal dryer.

Streamlined Requirements

Particulate matter emission limits indicated in the PSD permit are more restrictive than the particulate matter emission limits indicated by NSPS, Subpart Y. Therefore, the particulate matter emission limits indicated by the PSD permit will be placed in the permit.

Facility-Wide Requirements

Limitations

The following limitations are state BACT requirements from the PSD permit issued on July 30, 2004 (as amended August 24, 2005). Specific condition numbers noted below are from the PSD permit.

Condition 3.a: Coal conveying and storage equipment shall be covered.

Condition 3.b: Particulate emissions from screening, crushing, transfer and handling shall be controlled by a wet type dust collector, spray systems, enclosure or equivalent.

Condition 3.c: Coal cleaning and associated processing equipment shall be enclosed in the main building and shall utilize a wet process.

Condition 3.d: Coal refuse handling shall utilize high moisture content.

Condition 3.f: Particulate emissions from open coal stockpiles shall be controlled by wet suppression.

Condition 3.g: The rail loadout station shall be equipped with a flood-loading chute that telescopes down into the hopper cars.

Condition 3.h: Rock dust and magnetite silo vents shall be equipped with fabric filters.

Condition 3.i: Haul roads and parking areas shall be watered using a water truck and/or paved.

Condition 6: The production of clean coal from the facility shall not exceed 8.4 million tons per year.

Condition 10: Emissions from the operation of the coal processing and conveying equipment, coal storage equipment, and coal transfer and loading equipment shall not exceed the following:

Particulate Matter	20.05 lb/hr	45.73 tons/yr
PM-10	7.53 lb/hr	15.79 tons/yr

Condition 11: Emissions from the operation of the wet processes in the coal preparation plant shall not exceed the following:

Volatile Organic Compounds	53.1 tons/yr
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Condition 13: Visible emissions from each piece of coal processing, conveying, storage, transfer and loading equipment shall not exceed 20% opacity as determined by 40 CFR 60, Appendix A, Method 9.

Condition 14: Except where the permit is more restrictive than the applicable requirement, equipment subject to NSPS Subpart Y shall be operated in compliance with the requirements of NSPS Subpart Y.

Condition 24: The permittee will be required to take measures pertaining to maintenance, written operating procedures and training in order to minimize the duration and frequency of excess emissions.

Monitoring

The monitoring requirements included in the Title V permit meet Part 70 requirements.

Annual emission limits established for PM, PM-10, and VOC are based on the clean coal production limit contained in Condition 6 of the PSD permit. Regarding these pollutants, clean coal production is the factor that determines emission rates. Therefore, as long as the clean coal production limit is not violated, there should be no violation of emission limits. Recordkeeping demonstrating compliance with

the production limit can be used to demonstrate compliance with the emission limits; therefore, production limits satisfy the periodic monitoring requirement.

The permittee will be required to conduct weekly visual observations of all coal processing, conveying, storage, transfer and loading equipment. If visible emissions appear to exceed 10% opacity during these weekly visual observations, a six-minute visible emission evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9, must be performed on the emissions unit. If during the six minutes, any readings above 20% opacity are noted, a one-hour VEE will be required. A Method 9 evaluation will not be required if the visible emissions condition is corrected as expeditiously as possible such that no visible emissions exceed 10% opacity; the emissions unit is operating at normal conditions; and, the cause and corrective measures taken are recorded. This will satisfy the periodic monitoring requirement for the visible emission limitation included in the permit.

Recordkeeping

The Title V permit includes recordkeeping requirements from Condition 18 of the PSD permit and for maintaining records of all monitoring and testing required by the permit. These records include:

The production of clean coal from the facility, calculated monthly as the sum of each consecutive 12-month period;

Visible emission observations and evaluations; and,

Maintenance, operating procedures and training.

Testing

As indicated by Condition 15 of the PSD permit, the permittee will be required to conduct visible emission evaluations on all coal processing, conveying, storage, transfer and loading equipment that is to be constructed subject to NSPS, Subpart Y in accordance with 40 CFR 60, Appendix A, Method 9.

As indicated by Condition 19 of the PSD permit, the permitted facility shall be constructed and modified so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. Test ports shall be provided when requested at the appropriate locations.

The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

The permittee will be required to report the actual startup date of the coal handling, processing and storage equipment to be constructed and the anticipated date of visible emissions evaluations of that equipment as required by Conditions 17.b. and c. of the PSD permit. The reporting requirement of Condition 17.a. of the PSD permit has been fulfilled and is no longer applicable; therefore, it is not in the Title V permit.

The permittee will be required to report the results of the visible emissions evaluations required by Condition 15 of the PSD permit.

Streamlined Requirements

The 20% opacity limit specified in Subpart Y of the NSPS will be used in lieu of the Part V visible emission limit, since that limit allows one six-minute period per hour of 30% opacity.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.1-20.01:2 and §10.1-1185 of the *Code of Virginia*, and the “Department of Environmental Quality Agency Policy Statement No. 2-2003”.

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

U. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on General Condition F.

Y. Asbestos Requirements

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

STATE-ONLY APPLICABLE REQUIREMENTS

Consolidation Coal Company did not identify any state-only requirements in their application, and all requirements in the PSD permit are federally enforceable. Therefore, no state-only applicable requirements have been included in the permit.

FUTURE APPLICABLE REQUIREMENTS

Consolidation Coal Company did not identify any future applicable requirements in their application, and DEQ is unaware of any future requirements that may apply during the life of the Title V permit. Therefore, no future applicable requirements have been included in the permit.

INAPPLICABLE REQUIREMENTS

Consolidation Coal Company did not identify any inapplicable requirements in their application. Therefore, no inapplicable requirements are included in the permit.

COMPLIANCE PLAN

Consolidation Coal Company is currently in compliance with all applicable requirements. No compliance plan was required in the application.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation ¹ (9 VAC)	Pollutant Emitted (5-80-720 B.)	Rated Capacity (5-80-720 C.)
INS-01	Storage Tanks	5-80-720 B.2.	VOC	N/A
INS-02	Emergency Dryer Bypass	5-80-720 B	VOC, NO _x , SO ₂ , PM-10, CO	N/A
INS-03	Thermal Dryer Pre-Igniters	5-80-720 B	VOC, NO _x , SO ₂ , PM-10, CO	N/A
S031	Rail Car Loadout Sprays	5-80-720 B.2.	VOC	N/A

¹The citation criteria for insignificant activities is as follows:

9 VAC 5-80-720 B - Insignificant due to emission levels.

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

A public notice regarding the draft permit will be placed in the *Virginia Mountaineer* newspaper in Grundy, Virginia and public comments will be accepted for 30 days, thereafter. A copy of the draft permit will be sent to the USEPA prior to publication of the public notice. A copy of the public notice will be sent to the affected states, including West Virginia, Kentucky, North Carolina and Tennessee, by postal mail prior to publication of the public notice. A copy of the public notice will be sent to all persons on the Title V mailing list by electronic mail, fax or postal mail no later than the date of publication of the public notice.